

Appl. No. 10/628,768
Amtd. dated April 4, 2005
Reply to Office action of January 4, 2005

Remarks/Arguments

Claims 4, 5 and 7-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over either Calsteren et al or Taylor et al. Reconsideration and withdrawal of the rejection in view of the present amendments and for the following reasons is respectfully requested.

Work stations, safety cabinets, fume hoods, and similar devices, are generally comprised of certain basic components; namely, a work chamber with an air inlet and an air outlet, means to convey air through the work chamber, and filters to remove contaminants from air exhausted from the work chamber. However, as evidenced by the numerous existent patents describing such devices, there are innumerable ways to arrange these components and to add additional components that result in devices that perform in dramatically different ways.

In the present invention, these components are arranged in a unique and unobvious manner to provide a safety cabinet effective in filtering biological contaminants exhausted from the work chamber with only a single fan being required, and so that the single fan is isolated from contaminated air. As specifically claimed, the present structure requires 1) a work chamber with an air inlet and a contaminated air discharge opening, 2) a fan enclosure, 3) a conduit with a makeup air inlet extending from the contaminated air discharge opening to the fan enclosure, 4) a first HEPA filter downstream of the contaminated air outlet and air inlet and upstream of the fan enclosure; and 5) a fan within the fan enclosure to draw air through the conduit from the contaminated air outlet and makeup air inlet through the first HEPA filter into the fan enclosure. The fan is the only means for conveying air through the conduit and the first HEPA filter and into

the fan enclosure. In Claim 12, the cabinet is further defined as including a second HEPA filter.

As a result of this unique and unobvious configuration, a positive pressure is created downstream of the fan so that a portion of the air is exhausted through the fan enclosure exhaust port and a portion of the air is returned to the work chamber. In addition, the fan is isolated from contaminated air by the HEPA filter. In addition, as noted, only one fan is used.

Neither of the cited references teach or suggest the claimed structure or appreciate the results achievable from this structure. Specifically, the cited Calsteren et al. patent discloses a structure comprised of two fans. The first fan (13) operates at a substantially greater force than the second fan (17). Contaminated air from the work chamber and make up air are drawn by fan (13) through filter (12) and then a portion of the air is exhausted through exhaust filter (16) before reaching filter (18), resulting in an essentially neutral pressure within chamber (15). Therefore, a second fan (17) is required to force air through filter (18) into the work chamber. Thus, in addition to the fact that two fans are required, there is no showing or suggestion of drawing air from a conduit air inlet or exhausting air from a fan enclosure outlet.

The cited Taylor et al. patent is even further removed, and is constructed for an entirely different purpose. Specifically, the Taylor et al., device is constructed to provide a work chamber with a laminar flow of ultra clean air. There is no concern with filtering the air exhausted from the chamber. Note that the air from the chamber is exhausted from the device through the chamber access opening and is not directed to the filtration system. Instead, the filtration system is used solely to purify room air that is directed through the chamber. Thus, there is no air inlet in the conduit between the two filters, and no provision for a fan to draw

air from the work chamber discharge opening and an air inlet.

The Federal Circuit has ruled on numerous occasions that a holding of "obviousness" requires some motivation, suggestion or teaching within the cited references that would lead one skilled in the art to modify the cited reference or references as claimed by applicant, even if the rejection is based on a single reference. See, for example, *In re Kotzab*, 217 F3d 1365, 55 USPQ2d 1313 (Fed Cir. 2000):

"Most if not all inventions arise from a combination of old elements. See *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See *B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996)."

No such suggestion resides in the cited references. Therefore, for the forgoing reasons, and in view of the amendments to the claims, it is believed that this application now defines a patentably distinguishable invention and is accordingly in condition for allowance. Such action is respectfully solicited.

Respectfully submitted,


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